

Title:

JP8288652A2: SINTERING FURNACE OF CERAMIC MULTILAYERED BOARD AND ITS BAKING METHOD

Country:

JP Japan

Kind:

A

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HITACHI LTD

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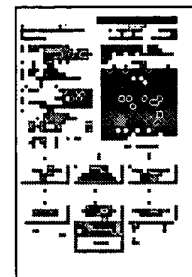
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Abstract:

PURPOSE: To reduce energy loss in the course of sintering a ceramic multilayered wiring board, and reduce manufacturing cost, by increasing or decreasing the amount of gas supplied to the inside of a sintering furnace from the outside, according to a baking temperature profile.

CONSTITUTION: Thermal decomposition of binder and combustion of residual carbon depend upon a temperature profile, so that supply amount of gas is controlled according to the profile. The supply amount of gas is decreased in the period from the time t1 to the time t2 and after the time t3. At the time t1, the thermal decomposition of binder is almost finished. At the time t2, the combustion of residual carbon is started. At the time t3, the elimination speed of the residual carbon becomes reaction rate determining speed of carbon and water vapor. In the later half of a residual carbon eliminating process, the reaction amount of carbon is little, so that the gas composition in the furnace can be maintained when the gas supply amount is reduced. Thereby the gas supply amount from the outside can be reduced. By installing a gas supply port 4 of a gas feeding tube 5, in the vicinity of a board 1, the gas is accelerated in the

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vicinity of the board 1 surface,
and material transfer is
increased.

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